

Meeting Goals

- Analysis of model simulations, scientific results
- Upcoming publications
- Model “mature”: where do we go from here?
 - Continuing tasks for model improvement
 - Specific problems to study: chemistry/climate?
 - Availability of simulations

REMINDER

- Please give electronic copies of your presentation to Kathy/Rose/Jose/Susan

ITEM FOR ALL GROUPS

- WHAT WILL YOU BE NEEDING FROM CORE INSTITUTION IN THE NEXT SIX MONTHS
 - BE SPECIFIC!!!

STRATOSPHERE

- Would like some sense of what, who, when the hindcast work will be analyzed, written up
 - Any further runs/diagnostics?
- Establish consistency between stratosphere-only model and combo
- AURA support? (Combo model?)
- Interaction with chemistry/climate effort?
- Do we know anything about WMO/UNEP?

TROPOSPHERE

- Continue discussion of model comparison
- PAPER(S):
 - Philosophy in first set of paper(s)
 - What needs to be done/assignments/time
 - Any further runs? (Cloud optical depth, GISS, fastJx?)
 - Subgroup meeting?
- What needs to be done to establish consistency with combo?
- Calculations by Bryan
- New set of calculations suggested by Daniel
- Higher resolution?

COMBO

- Model analysis:
 - Who, what, coordination
 - Resolve comparison with ozone sonde data, SAGE.
 - Paper (David)
- Tasks for Combo model over the next year

AEROSOLS

- Joyce left some to-dos (update from last meeting's discussion).
 - Revisit to-do's, priorities
 - Papers? (Liu/Penner; Weisenstein)
 - What is needed for papers?
- Interaction with chemistry/climate

SUGGEST:

- Have troposphere and combo discussion in first group (here)
- Aerosols to small meeting room
- Stratosphere in back of auditorium (or elsewhere?)

NOTES-TROP

- DESCRIPTION – MET. FIELDS INCLUDING KINKS –PAPERS ARE STILL BEING WRITTEN WITH THESE MET FIELDS.
- CHARACTERIZE MODEL PERFORMANCE BY COMPARISON TO OBSERVATIONS
- FREEZE CURRENT AS BASELINE MET FIELDS WITH SOME PROBLEMS:
 - CUT OPACITY IN GISS BY FACTOR OF 2
 - DAO: LOWER SYNOZ FLUX?? TROPOPAUSE?
 - Seasonal SYNOZ flux.
 - FVGCM: INTERANNUAL VARIABILITY
 - Vertical distribution???
 - 2x2.5? -
- WATER AN ISSUE?
- BUDGETS for OH etc - Jose

What observations to focus on:

- FOCUS ON MIDEAST OZONE?? JL
- NEED TO LOOK AT BUDGETS (MIDEAST)
 - COMPARE TO GEOS-CHEM PAPER.
 - STRONGER SUBSIDENCE?
 - Analyze tendencies, budgets.
 - Look at winds

Other aspects:

- NO_x/PAN/HNO₃ – Bob?
- Ozone in the South Atlantic
 - Sensitivity to injection altitude?
 - Fvgcm, another field?
- Tropical ozone -JAL, Bob
 - Convection?
- High latitude CO in winter (low).
 - Seasonal variation in emissions
- Delta CH₄ run (10% change)
PRATHER

- Analyze runs with new lightning – V3
 - Other details – define version 3. Updated FAST-Jx
 - Interactive aerosols, consistent with met.
 - Combo model
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- TRACE-P analysis with GEOS-3, forecast and the usual assim. GEOS-4, ECMWF forecast fields, NCEP(?), - Bryan
 - Global ozone budget – sensitivity to e.g., lightning NO_x, STE, resolution, isoprene, etc Daniel, Jose
 - Intercontinental transport – really needs several transport fields, 2x2.5 – Daniel, Bob C. Will build on TRACE-P analysis
 - Fields for 2004? Spring 04 on for INTEx, Aura, AIRS
 - GOME analysis using 3 met fields – Bryan – include INTEx period

- NEED TO SET UP A BROADCAST MESSAGE MECHANISM FOR INFORMATION ON RUNS.
- COMBO MODEL:
 - ADD STATIONS
 - DAVID TO MAKE SURE THAT EVERYTHING IN VERSION 2 IS ALSO INCLUDED (INCLUDING DIAGNOSTICS).

OUTSTANDING ITEMS

- Meeting in Norway
- Put together schedule for code modifications, runs, analyses (after meeting, JR, SS).
- CONTINUE discussion about roles of GMI in chemistry/climate, AURA
- What are we going to do in the long run about sensitivities to:
 - Emissions
 - Chemical mechanisms
 - Deposition processes
 - Others?
- Next meeting? Subgroup meetings?

STEERING COMMITTEE ITEMS

- Assessment of general progress, improvements...
- ESMF – MAP Modeling Environment
- GMI chemistry/climate
- Upcoming core group proposal
- Model efforts/ components?
 - Emissions
 - Deposition processes
 - MATCH
 - Radiative forcing
- Composition of steering committee